

In the Claims

Please substitute the claims as indicated below for the claims of the same number.

Claim 1 (Currently amended): A stent delivery assembly comprising:

an elongate wire having a proximal end, a distal end, and a length therebetween;
a radially expandable stent positioned coaxially on the wire towards the distal end; and
a tubular sheath member covering at least a portion of the wire wherein the sheath is retractable from a first position where the stent is covered by the sheath to a second position where the stent is uncovered such that the stent is unhindered during sheath retraction;
wherein the assembly is adapted for insertion within a catheter body lumen.

Claim 2 (Original): The assembly of claim 1 further comprising a coil disposed at the distal end of the wire.

Claim 3 (Original): The assembly of claim 2 wherein the coil is radio-opaque.

Claim 4 (Original): The assembly of claim 1 wherein the wire comprises a tapered section located proximally of the stent.

Claim 5 (Original): The assembly of claim 1 wherein the wire comprises a tapered section located distally of the stent.

Claim 6 (Original): The assembly of claim 1 wherein the wire has a first diameter and at least one section having a second diameter which is smaller than the first diameter and wherein the stent is positioned coaxially about the second diameter.

Claim 7 (Original): The assembly of claim 1 further comprising at least one radio-opaque marker band located on the wire proximally or distally of the stent.

Claim 8 (Original): The assembly of claim 1 wherein the radially expandable stent is comprised of a radio-opaque material.

Claim 9 (Original): The assembly of claim 8 wherein the radio-opaque material comprises platinum.

Claim 10 (Original): The assembly of claim 1 wherein the radially expandable stent is comprised of a shape memory alloy.

Claim 11 (Original): The assembly of claim 10 wherein the shape memory alloy comprises Nitinol.

Claim 12 (Original): The assembly of claim 1 wherein the sheath further comprises a flush port located near a proximal end of the sheath, wherein the flush port is in fluid communication with a distal end of the sheath.

Claim 13 (Original): The assembly of claim 1 further comprising an inflatable angioplasty balloon section located near the distal end of the wire.

Claim 14 (Original): The assembly of claim 13 wherein the balloon section is located proximally or distally of the stent.

Claim 15 (Currently amended): A method of delivering a stent within a hollow body organ comprising:

advancing an elongate wire having a proximal end, a distal end, and a length therebetween ~~through a catheter body lumen~~ to a preselected treatment site within the hollow body organ, wherein at least a portion of the wire is covered by a tubular sheath member;

positioning a radially expandable stent adjacent to the treatment site, wherein the stent is positioned coaxially towards the distal end of the wire; and

retracting the sheath member distally proximally along the wire such that the stent is unhindered during sheath retraction and expands radially into contact over the treatment site.

Claim 16 (Original): The method of claim 15 further comprising positioning a radially expandable balloon section adjacent to the treatment site prior to positioning the radially expandable stent, wherein the balloon section is located near the distal end of the wire.

Claim 17 (Original): The method of claim 16 further comprising expanding the balloon section against the treatment site.

Claim 18 (Currently amended): The method of claim 15 further comprising flushing a fluid between the wire and the tubular sheath member prior to advancing the elongate wire ~~through the catheter body lumen.~~

Claim 19 (Original): The method of claim 15 wherein positioning the radially expandable stent adjacent to the treatment site comprises determining the stent location relative to the treatment site via at least one radio-opaque marker located on the wire.

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Claim 20 (Currently amended): The method of claim 15 wherein retracting the sheath member ~~distally proximally~~ comprises moving the sheath member relative to the wire from a first position where the stent is covered by the sheath to a second position where the stent is uncovered.

Claim 21 (Currently amended): The method of claim 15 further comprising advancing ~~the a~~ catheter body through the hollow body organ to the treatment site prior to advancing the elongate wire.

Claim 22 (Currently amended): The method of claim 15 further comprising withdrawing the wire from the ~~catheter~~ hollow body lumen organ.

Claim 23 (New): The method of claim 15 wherein advancing the elongate wire comprises advancing the wire through a catheter body lumen.

Claim 24 (New): A method of delivering a stent within a hollow body organ comprising:
advancing an elongate wire having a proximal end, a distal end, and a length
therebetween to a preselected treatment site within the hollow body organ, wherein at least a portion
of the wire is covered by a tubular sheath member;

positioning a radially expandable stent adjacent to the treatment site, wherein the stent is
positioned coaxially towards the distal end of the wire; and

distally advancing the wire while maintaining a position of the sheath member relative to
the hollow body organ such that the stent is unhindered during sheath retraction and expands
radially into contact over the treatment site.

Claim 25 (New): The method of claim 24 further comprising positioning a radially
expandable balloon section adjacent to the treatment site prior to positioning the radially expandable
stent, wherein the balloon section is located near the distal end of the wire.

Claim 26 (New): The method of claim 25 further comprising expanding the balloon
section against the treatment site.

Claim 27 (New): The method of claim 24 further comprising flushing a fluid between
the wire and the tubular sheath member prior to advancing the elongate wire.

Claim 28 (New): The method of claim 24 wherein positioning the radially expandable stent adjacent to the treatment site comprises determining the stent location relative to the treatment site via at least one radio-opaque marker located on the wire.

Claim 29 (New): The method of claim 24 wherein distally advancing the wire comprises moving the wire relative to the sheath member from a first position where the stent is covered by the sheath to a second position where the stent is uncovered.

Claim 30 (New): The method of claim 24 further comprising advancing a catheter body through the hollow body organ to the treatment site prior to advancing the elongate wire.

Claim 31 (New): The method of claim 24 further comprising withdrawing the wire from the hollow body organ.

Claim 32 (New): The method of claim 24 wherein advancing the elongate wire comprises advancing the wire through a catheter body lumen.